STATEMENT OF LEGAL AND FACTUAL BASIS

CPFilms, Inc.
P. O. Box 5068, Martinsville, VA 24115
Permit No. WCRO-30294

Title V of the 1990 Clean Air Act Amendments required each state to develop a permit program to ensure that certain facilities have federal Air Pollution Operating Permits, called Title V Operating Permits. As required by 40 CFR Part 70 and 9 VAC 5 Chapter 80, CPFilms, Inc. has applied for a Title V Operating Permit renewal for its solar controlled window film manufacturing plant in Fieldale. The Department reviewed the application for permit renewal and prepared a draft/proposed Title V Operating Permit.

Engineer/Permit Contact:_____ Date:_____

Paul R. Jenkins
Permit Engineer
540-562-6822

Air Permit Manager:_____ Date:_____

Michael J. Scanlan, Ph.D.
Regional Air Permit Manager

FACILITY INFORMATION

Permittee
Solutia Inc.
P.O. Box 66760
St. Louis, MO 63166-6760

Responsible Official
Keith Dalton, Vice President, Operations

Operator
CPFilms, Inc.
P.O. Box 5068
Martinsville, VA 24115

Facility
CPFilms, Inc. – Fieldale Plant
4210 The Great Road
Fieldale, VA 24089

Contact Person
Lindsay Vergara, Environmental Specialist
276-627-3475

County-Plant Identification Number: 51-089-0035

First Renewal of Title V Operating Permit

SOURCE DESCRIPTION

NAICS Code: 322222 – Coated and Laminated Paper Manufacturing.
SIC Code 2672 – Coated and Laminated Paper.

This facility was constructed in 1976. The facility was owned by Martin Processing Inc. and then Courtaulds Performance Films (now CPFilms, Inc.) The current parent company of CPFilms, Inc. is Solutia, Inc.

The facility has four (Dye Line 2 was removed from the facility) continuous polyester film dye lines that are used to dye the film prior to further processing at the CPFilms Fieldale facility or being sold to other window film product manufacturers. Dye lines 1, 3 and 4 (EU01, EU03 and EU04) consists of the following devices: an unwinding station, dye mixing tank, heated ethylene glycol (EG) dye bath, N-Methyl-2-Pyrrolidone (NMP) wash bath, two water wash baths, a dryer and a rewinding station. The dispersive powdered dyes are mixed in EG tanks and pumped to the dye bath. The web film passes through the heated dye bath where the dye penetrates the film. The EG emissions from the dye bath are collected by exhaust hoods. The captured EG emissions are recovered for reuse by the EG recovery system; the EG recovery system consists of a pre-cooler in series with a Brinks mist eliminator and storage tanks. Dye Lines 1, 3 and 4 (EU01, EU03 and EU04) are existing sources and were constructed prior to the time that permits were issued for construction. These three lines are subject to 9 VAC 5-60-200 et seq (Emission Standards for Toxic Pollutants from Existing Sources).

Dye Line 7 (EU07) is similar to Dye Lines 1, 3 and 4 except that the dye baths, NMP wash and water tanks and the thermal dryer are located inside a permanent total enclosure. The NMP emissions are routed to a wet scrubber. EU07 is subject to 9 VAC 5-60-300 et seq (Emission Standards for Toxic Pollutants from New and Modified Sources).

Following the dye bath the film is washed in NMP and two subsequent water baths to remove the excess dyes. The NMP baths, water wash baths and dryers for the film processed through Dye Lines 1, 3 and 4 do not have exhaust hoods or VOC emissions control devices. The NMP emissions are vented through the building's roof and wall vents. After rinsing the film is dried; the dryer's burner is rated at 1.2 MMBtu/hr and operates on propane.

The facility has ten coating lines – EU 24, 26, 27, 28, 29, 30, 31, 32, 33 and 34. All of the coating lines utilize capture and control except EU27 and EU31. EU27 uses coatings that do not contain HAPs and EU31 uses low HAP coatings.

The facility is a Title V major source due to actual VOC emissions exceeding 100 tons/yr and actual individual HAPs exceeding 10 tons/yr and combined HAPs exceeding 25 tons/yr.

MACT, 40 CFR 63 Subpart JJJJ, applies to the coating lines at the facility; the dye lines are not subject to MACT JJJJ because that MACT does not cover dyeing. MACT, 40 CFC 63 Subpart OOOO does not apply because it covers the coating and dyeing of fabric, not film.

The source is located in a Prevention of Significant Deterioration area as designated in 9 VAC 5-20-205, and is a PSD major source (VOC). None of the NSPS regulations apply to the facility.

The facility has the following permits:

October 15, 2004	State Operating Permit	EU07
June 14, 1989	NSR Minor	EU28
July 20, 2007	NSR Minor	EU29 and EU30
June 8, 1994	NSR Minor	EU31
January 30, 1997	NSR Minor	EU32 and EU33
June 23, 2000	NSR Minor	EU34

The original Title V operating permit was issued on September 21, 2001. The original permit will be replaced with this first renewal. The applicant submitted a timely and complete Title V permit application for a renewal, which extends the terms of the current Title V permit until renewal.

COMPLIANCE STATUS

The facility was determined to be in compliance during its last inspection on September 6, 2007.

EMISSION UNIT AND CONTROL DEVICE IDENTIFICATION

The emission units at this facility consist of the following:

Emission Unit ID	Stack ID	Emission Unit Description	Size/Rated Capacity*	Pollution Control Device (PCD) Description	Pollutant Controlled	Applicable Permit Date
Process Units						
01	01	Dye Line No. 1	45,000 ft²/hour			
03	03	Dye Line No. 3	55,000 ft²/hour			
04	04	Dye Line No. 4	78,000 ft²/hour			
05	05	Eclipse Lookout Boiler (Natural Gas)	10 MMBtu/hr (input)			
07	07a & 07b	Dye Line No. 7	74,000 ft²/hour	CPFilms custom design Ethylene Glycol Recovery System w/ precooler and mist eliminator. Bionomics ScubPac Proclean 15,000 Packed-Bed Scrubber	VOC & HAP	October 15, 2004
24	24/26	Faustel/Inta-Roto coating/laminating machine.	90,000 ft²/hour	MegTec RTO CS-300	VOC & HAP	
26	24/26	Faustel coating/laminating machine	90,000 ft²/hour	MegTec RTO CS-300	VOC & HAP	
27	27a & 27b	Faustel UV coating machine	90,000 ft²/hour	-	-	
28	28	Faustel coating/laminating machine	90,000 ft²/hour	Combustion Engineering/ABB, Cor-Pak 8000, direct flame afterburner	VOC & HAP	June 14, 1989
29	29	Faustel UV Coating /Laminating Machine	90,000 ft²/hour	TEC Grace Systems, Quantum	VOC & HAP	July 20, 2007
30	30	Faustel Silicone Coating Machine	90,000 ft²/hour	Combustion Engineering/ABB, Cor-Pak 8000, direct flame afterburner	VOC & HAP	July 20, 2007
31	31a	Faustel coating (UK-3) machine	112,000 ft²/hour			June 8, 1994

Emission Unit ID	Stack ID	Emission Unit Description	Size/Rated Capacity*	Pollution Control Device (PCD) Description	Pollutant Controlled	Applicable Permit Date
32	32	Lembo coating machine	90,000 ft²/hour	TEC Grace Systems, Shadow	VOC & HAP	January 30, 1997
33	33	Faustel coating/laminating machine	111,000 ft²/hour	TEC Grace Systems, Magnum	VOC & HAP	January 30, 1997
34	34	Faustel coating/laminating machine	111,000 ft²/hour	MegTec RTO, Enterprise	VOC & HAP	June 23, 2000

EMISSIONS INVENTORY – Actual Emissions

Actual plant emissions for calendar year 2006 are summarized as follows:

2006 Actual Pollutant Emissions in Tons per Year						
	CO	Ethylene Glycol	NO_2	PM_{10}	Toluene	VOC
TOTAL	0.53	138	0.806	0.01	1	210.03

NSPS, MACT, and CAM APPLICABILITY

NSPS – The NSPS regulations do not apply to any of the equipment at this facility.

MACT – MACT, 40 CFR 63 Subpart JJJJ, applies to the coating lines because MACT JJJJ covers coating operations. MACT, 40 CFC 63 Subpart OOOO does not apply because it covers the coating and dyeing of fabric, not film.

CAM – Compliance Assurance Monitoring. CAM applies to Dye Bath 7 (EU07). CAM applies because the Pollutant Specific Emissions unit (PSEU) is 1) subject to an emissions limit 2) uses a control device to achieve compliance, and 3) has potential pre-control emissions that exceed or are equivalent to the major source threshold. The coating lines meet the same criteria, however, they are subject to MACT JJJJ and the compliance requirements for that MACT are at least as stringent as the CAM requirements.

The CAM regulation (40 CFR Part 64.1) exempts *Inherent process equipment* from being applicable to the regulation. Although condensers can be considered inherent process equipment, the condensers at this facility do not meet the definition of inherent process equipment because the source installed and operated the equipment primarily for the purpose of compliance with air pollution regulations.

CHANGES TO PLANT

This permit renewal incorporates conditions from the October 15, 2004 State Operating Permit for the installation and operation of Dye Line 7 (EU07).

CHANGES TO PERMIT

1. Replaced "Director" with "Air Compliance Manager" for reporting.

2. Updated permit language by using the current Title V permit boilerplate.

3. Included the CAM Plan.

4. The initial Title V permit required weekly visible emission evaluations (VEE) and monthly VEE if the source compiled six months of VEE showing compliance. This permit allows monthly VEE unless any VEE exceeds the permit limits. If the facility exceeds a visible emissions limit then the facility must conduct weekly VEE on that piece of equipment, until they compile six months of VEE showing compliance.

5. Included changes that were incorporated in the facility's State Operating Permit.

REPORTING

- Annual Title V Compliance Certifications -The permittee shall submit calendar year Title V

Compliance Certifications by March 1 of each year to the DEQ and to the EPA.

- Semi-Annual Title V Reports - The permittee shall submit semi-annual Title V Reports by March 1 and September 1 of each year to the DEQ. The time periods to be addressed are January 1 to June 30 and July 1 to December 31.

- CAM Compliance Reports – The source will meet CAM reporting requirements by incorporating any CAM compliance issues into the Title V reports. The October 22, 1997 Federal Register (Page 54938) explains that the EPA did not intend to create a separate compliance certification requirement for CAM.

- Malfunction or Deviation Reports - The permittee shall report to the DEQ within 4 daytime business hours after the discovery of any malfunction and any deviation from permit requirements that may cause excess emissions for more than one hour. A written statement with the pertinent information shall be submitted to DEQ within 14 days of discovery.

GENERAL CONDITIONS

The permit contains general conditions required by 40 CFR Part 70 and 9 VAC 5-80-110 that apply to all Federal-operating permitted sources. Selected requirements are noted below.

B. Permit Expiration
This condition refers to the five year permit term, to the permittee's responsibility to apply for renewal, to the Board taking action on a permit application, and to the prior terms and conditions remaining in effect until the renewal is issued or denied. The Board is the State Air Pollution Control Board. The authority to take action on permit application(s) has been delegated to the Regions as allowed by §2.1-20.01:2 and §10.1-1185 of the *Code of Virginia,* and the "Department of Environmental Quality Agency Policy Statement No. 3-2001".

J. Permit Modification
This general condition cites the sections that follow:
9 VAC 5-80-50. Applicability, Federal Operating Permit for Stationary Sources
9 VAC 5-80-190. Changes to Permits
9 VAC 5-80-260. Enforcement
9 VAC 5-80-1100. Applicability, Permits for New and Modified Stationary Sources
9 VAC 5-80-1790. Applicability, Permits for Major Stationary Sources and Modifications Located in Prevention of Significant Deterioration Areas

U. Malfunction as an Affirmative Defense
The Virginia Regulations for the Control and Abatement of Air Pollution contain two reporting requirements for malfunctions that coincide. The reporting requirements are listed in sections 9

VAC 5-80-250 and 9 VAC 5-20-180. The malfunction requirements are listed in General Condition U and General Condition F.

This condition cites the sections that follow:
9 VAC 5-20-180. Facility and Control Equipment Maintenance or Malfunction
9 VAC 5-80-110. Permit Content

Y. Asbestos Requirements
The Virginia Department of Labor and Industry under Section 40.1-51.20 of the Code of Virginia also holds authority to enforce 40 CFR 61 Subpart M, National Emission Standards for Asbestos.

This general condition contains a citation from the Code of Federal Regulations that follows:
40 CFR 61.145, NESHAP Subpart M. National Emissions Standards for Asbestos as it applies to demolition and renovation.
40 CFR 61.148, NESHAP Subpart M. National Emissions Standards for Asbestos as it applies to insulating materials.
40 CFR 61.150, NESHAP Subpart M. National Emissions Standards for Asbestos as it applies to waste disposal.

STATE ONLY APPLICABLE REQUIREMENTS
The source requested that the State Only applicable requirements that are in the underlying State Operating Permit not be included in the Title V permit.

FUTURE APPLICABLE REQUIREMENTS
None

INAPPLICABLE REQUIREMENTS
40 CFR 60 Subpart IIII (the NSPS) contains standards for stationary engines. 40 CFR 60.4200 states the NSPS applies to engines manufactured after April 1, 2006. If CPFilms adds engines at a later date, these engines may be subject to the NSPS. 40 CFR 63 Subpart ZZZZ (RICE MACT) contains standards for stationary engines. This MACT does not currently apply to CPFilms, however, depending on future equipment installations this MACT could apply in the future.

The startup, shut down, and malfunction opacity exclusion listed in 9 VAC 5-40-20 A 3 (for pre-1972 existing emission units) cannot be included in any Title V permit because this portion of the regulation is not part of the federally approved state implementation plan (SIP). The opacity standard applies to existing sources at all times including startup, shutdown, and malfunction. An opacity exceedance during a malfunction can be affirmatively defended provided all requirements of the affirmative defense section of this permit are met. An opacity exceedance during startup and shut down will be reviewed with enforcement discretion using the

requirements of 9 VAC 5-40-20 E, which state that "At all times, including periods of startup, shutdown, soot blowing and malfunction, owners shall, to the extent practicable, maintain and operate any affected facility including associated air pollution control equipment in a manner consistent with air pollution control practices for minimizing emissions."

In contrast, the similar startup, shut down, and malfunction opacity exclusion listed in 9 VAC 5-50-20 A 4, for emissions units that are new or modified since 1972, is SIP approved and therefore applies to such emissions units. Since the dye baths were installed after 1972, the existing source opacity exclusion is not applicable for any equipment at this facility.

Annual emissions of VOCs for EU28, 29, 30, 31, 32, 33 and 34 are less than half of the individual emission limits. Therefore, based on Agency Guidance (2-16-2007 APMG Meeting), once per permit term testing is not required for the control devices associated with these lines.

COMPLIANCE PLAN

This facility is not subject to a compliance plan.

INSIGNIFICANT EMISSION UNITS

EMISSION UNIT NO.	Emission Unit Description	Citation	Pollutant(s) Emitted	Rated Capacity
35	Space Heaters	9 VAC 5-80-720A	Criteria Pollutants	
36	Lab hoods (Plant 1)	9 VAC 5-80-720A	VOCs	
37	Peerless natural gas fired boiler (Plant 1)	9 VAC 5-80-720C	Criteria Pollutants	1.8 MMBtu/hr
38	(4) Sputtering machines & (1) Pilot Unit (Plant 1)	9 VAC 5-80-720B	None	
39	Pilot dye line with electric dryer (Plant 2)	9 VAC 5-80-720A	VOCs	
41	(2) Hot melt glue application units on Boxing Lines (Plant 1)	9 VAC 5-80-720B	VOCs	
42	Natural gas fired industrial air stream heater Rewind Area (Plant 1)	9 VAC 5-80-720C	Criteria Pollutants	0.714 MMBtu/hr
43	Pilot laminators with gas dryers	9 VAC 5-80-720B	VOCs, NOx, CO	
44	(2) Emergency diesel fired generator	9 VAC 5-80-720C	Criteria Pollutants	125 kw
44	(2) Diesel fuel storage tank	9 VAC 5-80-720B	VOCs	200 gallons
45	Propane storage tank (Plant 1)	9 VAC 5-80-720B	VOCs	1,000 gallons
46	(2) Natural gas fired industrial air stream heaters Master Service Area	9 VAC 5-80-720C	Criteria Pollutants	1.26 MMBtu/hr

EMISSION UNIT NO.	Emission Unit Description	Citation	Pollutant(s) Emitted	Rated Capacity
	(Plant 1)			
47	Natural gas fired space heaters (Plant 2)	9 VAC 5-80-720A	Criteria Pollutants	
48	(4) Metallizing Units (Plant 2)	9 VAC 5-80-720B	None	
49	Caustic Soda Cleaning Baths	9 VAC 5-80-720B	None	
50	Laboratory Hoods in Plant 2	9 VAC 5-80-720B	VOCs	
51	Natural gas-fired dryers for Dye Lines	9 VAC 5-80-720C	Criteria Pollutants	<10 MMBtu/hr
52	Manual Solvent Cleaning	9 VAC 5-80-720B	VOCs	<5,000 lbs solvent
53	Natural gas fired industrial air system space heaters (Plant 2)	9 VAC 5-80-720C	Criteria Pollutants	1.3 MMBtu/hr
54	Natural gas fired radiant space heaters (Plant 2)	9 VAC 5-80-720A	Criteria Pollutants	<10 MMBtu/hr
55	Water-based parts washer (one in each plant)	9 VAC 5-80-720B	VOCs	30-gallon units
56	Propane storage tank (Plant 2)	9 VAC 5-80-720B	VOCs	500 gallon capacity
57	Rag Compactor (Plant 2)	9 VAC 5-80-720B	VOCs	
60	Natural gas fired radiant space heaters (Plant 1)	9 VAC 5-80-720C	Criteria Pollutants	<10 MMBtu/hr each
61	Natural gas fired dryers – Lines 24, 26, 27, 29, 30, 31, 32, 33 & 34.	9 VAC 5-80-720C	Criteria Pollutants	<10 MMBtu/hr each
63	Diesel fired emergency water pump at Plant 2	9 VAC 5-80-720C	Criteria Pollutants	157 hp
63	Diesel fuel tank for emergency water pump	9 VAC 5-80-720B	Criteria Pollutants	200 gallons
64	Lathe lubricating oil use	9 VAC 5-80-720B	None	
011	Natural gas fired boiler for Dye Line No. 7	9 VAC 5-80-720C	Criteria Pollutants	4.0 MMBtu/hr
007T1	Ethylene Glycol Storage Tank	9 VAC 5-80-720B	HAP	236 gallons
007T2	Ethylene Glycol Storage Tank	9 VAC 5-80-720B	HAP	236 gallons
007T3	Ethylene Glycol Storage Tank	9 VAC 5-80-720B	HAP	236 gallons

CONFIDENTIAL INFORMATION

The permittee did not submit a request for confidentiality. All portions of the Title V application are suitable for public review.

PUBLIC PARTICIPATION

The draft/proposed permit was advertised for public notice in the Martinsville Bulletin on January 16, 2008**.** The required 30-day public notice period ended on February 15, 2008

The EPA 45 day concurrent review period was January 25, 2008 through March 10, 2008.

No comments were received.
This permit was advertised for *concurrent review*.